

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

MAR 3 1 2011

REPLY TO THE ATTENTION OF: A E-17.I

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

Paul Undeland Managing Superintendent, Rapids Energy Center Minnesota Power Company Division of Allete, Inc. 502 NW 3<sup>rd</sup> Street Grand Rapids, Minnesota 55744

RE: Notice and Finding of Violation issued to Allete Incorporated, d/b/a Minnesota

Power Company, Rapids Energy Center

Dear Mr. Undeland:

This is to advise you that the U.S. Environmental Protection Agency has determined that Allete Inc., d/b/a Minnesota Power Company (Allete) is in violation of the Clean Air Act (CAA) at its Rapids Energy Center (REC facility) located in Grand Rapids, Minnesota.

EPA is issuing this Notice of Violation and Finding of Violation (NOV/FOV) in accordance with Section 113(a) of the CAA, 42 U.S.C. § 7413(a), to Allete for violating the Prevention of Significant Deterioration requirements under Section 165 of the CAA, 42 U.S.C. § 7475, and their implementing regulations at 40 C.F.R. § 52.21; the Minnesota State Implementation Plan; construction/operation permits issued by the Minnesota Pollution Control Agency; the New Source Performance Standards Applicable to Industrial-Commercial Institutional Steam Generating Units at 40 C.F.R. § 60.7-60.8 and 40 C.F.R Part 60, Subpart Db, 40 C.F.R. §§ 60.40b-49b; and Title V of the CAA.

Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial criminal action. The option we select, in part, depends on the efforts taken by Allete to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the NOV/FOV.

Before we determine which enforcement option is appropriate, we are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for the REC facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

If you wish to request a conference, please contact Virginia Palmer of my staff at 312-353-2089, or John Matson of the Region 5 Office of Regional Counsel at 312-886-2243. You should make your request for a conference no later than 10 calendar days after you receive this letter, and we should hold any conference within 30 calendar days of your receipt of this letter.

Sincerely,

Heryl L. Newton

Director

Air and Radiation Division

#### Enclosure

cc: Jeff T. Connell, Manager Compliance and Enforcement Section Industrial Division Minnesota Pollution Control Agency

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## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

IN THE MATTER OF:	)	
	)	
Allete, Inc.	)	NOTICE OF VIOLATION
d/b/a Minnesota Power Company	)	AND
Duluth, Minnesota	)	FINDING OF VIOLATION
	)	
Proceedings Pursuant to	)	EPA-5-11-MN-01
Section 113(a)(1) of the	)	
Clean Air Act, 42 U.S.C.	)	
§ 7413(a)(1)	)	

## **NOTICE AND FINDING OF VIOLATION**

The U.S. Environmental Protection Agency issues this Notice and Finding of Violation (NOV/FOV) to Allete, Inc. d/b/a Minnesota Power Company (Allete) for violations of the Clean Air Act (CAA), 42 U.S.C. §§ 7401 et seq., and the Minnesota State Implementation Plan (SIP) at its Rapids Energy Center (REC facility) located in Grand Rapids, Minnesota.

This NOV/FOV is issued pursuant to Section 113(a)(1) and (a)(3) of the CAA, 42 U.S.C. § 7413(a)(1) and (a)(3). The authority to issue this NOV/FOV has been delegated to the Regional Administrator of EPA, Region 5, and re-delegated to the Director of the Air and Radiation Division, Region 5.

#### STATUTORY AND REGULATORY BACKGROUND

1. The CAA is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. See Section 101(b)(1) of the CAA, 42 U.S.C. § 7401(b)(1).

## A. <u>Prevention of Significant Deterioration Requirements</u>

- 2. When Congress passed the CAA in 1970, it exempted existing facilities from many of its requirements. However, Congress also intended that the exemption would not "constitute a perpetual immunity from all standards under the PSD program." Alabama Power v. Costle, 636 F.2d 323, 400 (D.C. Cir. 1979). Rather, when a previously-exempted facility intends to perform modifications at the facility that may significantly increase emissions, the CAA requires grandfathered facilities to install modern pollution control devices.
- 3. The Prevention of Significant Deterioration (PSD) provisions of Part C of Title I of the CAA, 42 U.S.C. §§ 7470-7492, and their implementing regulations at 40 C.F.R. § 52.21 (collectively the PSD Program), establish preconstruction requirements applicable to the construction and modification of "major emitting facilities" located in areas designated as either

attainment or unclassifiable for purposes of meeting the National Ambient Air Quality Standards.

- 4. The PSD Program prohibits, among other things, a "major emitting facility" from constructing a "major modification" unless it has obtained a pre-construction PSD permit that applies Best Available Control Technology (BACT). The PSD program further provides that such a facility must perform a source impact analysis, perform an air quality analysis and modeling, submit appropriate information, and conduct additional impact analyses as required.
- 5. Pursuant to Section 169 of the CAA, 42 U.S.C. § 7479(1), a "major emitting facility" is defined to include, among others, any stationary source which emits, or has the potential to emit, 100 tons per year or more of any regulated PSD pollutant from fossil-fuel boilers totaling more than 250 million British thermal units (Btu) per hour heat input, and any other stationary source which emits, or has the potential to emit, 250 tons per year or more of any regulated PSD pollutant.
- 6. Sections 110(a) and 161 of the CAA, 42 U.S.C. §§ 7410(a) and 7471, require each state to adopt a SIP containing regulations implementing the PSD Program.
- 7. A state may comply with Sections 110(a) and 161 of the CAA, 42 U.S.C. §§ 7410(a) and 7471, by having its own PSD regulations approved by EPA as part of its SIP, provided that the state PSD regulations are at least as stringent as those set forth at 40 C.F.R. § 51.166.
- 8. Pursuant to 40 C.F.R. § 52.21(a), if a state does not have PSD regulations that EPA has approved and incorporated into its SIP, EPA may incorporate the federal PSD regulations set forth at 40 C.F.R. § 52.21 into the SIP.
- 9. Pursuant to 40 C.F.R. § 52.23, any person failing to comply with an approved regulatory provision of a SIP is subject to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.
- 10. On August 7, 1980, EPA disapproved Minnesota's PSD program. Accordingly, EPA incorporated the federal PSD regulations of 40 C.F.R. § 52.21(b) through (w) into the Minnesota SIP at 40 C.F.R. § 52.1234. 45 Fed. Reg. 52741 (August 7, 1980), as amended at 53 Fed. Reg. 18985 (May 26, 1988). EPA delegated to MPCA the authority to review and process PSD permit applications, and to implement the federal PSD program. 46 Fed. Reg. 9580. (Jan. 29, 1981).
- 11. The PSD regulations set forth in 40 C.F.R. § 52.21 apply to "any project at an existing 'major stationary source" in an attainment or unclassifiable area. 40 C.F.R. § 52.21(a)(2)(i).

<sup>&</sup>lt;sup>1</sup>For all PSD violations cited in this FOV/NOV, the applicable regulations are the federal PSD provisions of 40 C.F.R. §§ 52.21(b) through (w).

- 12. Pursuant to 40 C.F.R § 52.2 l(b)(l)(i)(a)-(b), a "major stationary source" is defined to include, among others, any stationary source of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant, from fossil-fuel boilers (or combinations thereof) totaling more than 250 million Btus per hour heat input, and any stationary source which emits, or has the potential to emit, 250 tons per year or more of any regulated PSD pollutant.
- 13. 40 C.F.R § 52.21(b)(2)(i) provides that a "major modification" is defined as "any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase... of a regulated NSR pollutant...; and a significant net emissions increase of that pollutant from the major stationary source."
- 14. Pursuant to 40 C.F.R § 52.21(a)(2)(iv)(a), "a project is a 'major modification' for a regulated NSR [PSD] pollutant if it causes two types of emissions increases" a "significant emissions increase" and a "significant net emissions increase."
- 15. A "net emissions increase" is "the amount by which the sum of the following exceeds zero: (a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(iv) of this section; and (b) Any other increases or decreases in actual emissions at the major stationary sources that are contemporaneous with that particular change and are otherwise creditable." 40 C.F.R § 52.21(b)(3)(i).
- 16. Pursuant to 40 C.F.R § 52.21(b)(40), a "significant emissions increase" for the regulated PSD pollutant nitrogen oxides (NO<sub>X</sub>) means an increase in the rate of NO<sub>X</sub> emissions that would equal or exceed 40 tons of NO<sub>X</sub> per year (tpy).
- 17. Pursuant to 40 C.F.R § 52.21(b)(23)(i), a "significant net emissions increase" for NO<sub>X</sub> means an increase in the rate of NO<sub>X</sub> emissions that would equal or exceed 40 tpy.
- 18. Pursuant to 40 C.F.R § 52.21(a)(2)(ii) if a "major stationary source" in an attainment or unclassifiable area plans to construct a "major modification" under the foregoing definitions, then it is subject to the requirements of the PSD Program set forth at 40 C.F.R § 52.21(j)-(r).
- 19. Pursuant to 40 C.F.R § 52.21(a)(2)(iii), "no new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) of this section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements."
- 20. Pursuant to 40 C.F.R § 52.21(j)-(r), to construct a "major modification" in an attainment area, a "major stationary source" subject to the PSD Program must, among other things: 1) meet all applicable emissions limitations under the SIP, along with any standards of performance under 40 C.F.R. Parts 60 and 61; 2) perform an analysis of source impacts; 3) perform air quality modeling and analysis; 4) obtain a PSD permit; and 5) install and apply

BACT control devices for each regulated PSD pollutant for which the modification would result in a significant net emissions increase.

- 21. "Best available control technology" means an emissions limitation reflecting the maximum degree of reduction of each regulated PSD pollutant which the permitting authority determines is achievable for a facility on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs. Section 169(3) of the CAA, 42 U.S.C. § 7479(3).
- 22. Pursuant to § 52.21(r)(1), any owner or operator who constructs or operates a source or modification not in accordance with its PSD application, or who commences construction without applying for and receiving an approved PSD permit, shall be subject to an enforcement action.

## B. Facility Permit Requirements

- 23. Section 110 of the CAA, 42 U.S.C. § 7410, requires each state to adopt and submit to the Administrator of EPA (Administrator) a plan which provides for the implementation, maintenance and enforcement of all national primary or secondary standards established pursuant to Section 109 of the CAA, 42 U.S.C. § 7409. These SIPs are required to include enforceable emission limitations, control measures, schedules for compliance, and permit programs for new sources.
- 24. Section 110(n)(1) of the CAA, 42 U.S.C. § 7410(n)(1), provides that any provision of any applicable SIP that was approved or promulgated by the Administrator pursuant to Section 110 of the CAA, as in effect prior to November 15, 1990, shall remain in effect as part of such SIP, except to the extent that a revision to such provision is approved or promulgated by the Administrator.
- 25. Pursuant to Section 110 of the CAA, 42 U.S.C. § 7410, the Administrator approved Minn. R. 7007.0150 as part of the federally enforceable SIP for Minnesota on December 1, 2001.
- 26. Pursuant to Minn. R. 7007.0150, no person may construct, modify, reconstruct, or operate an emissions unit emissions facility, or stationary source, excépt in compliance with an air emissions permit from MPCA. See also Minn. R. 7001.0300.
- 27. Pursuant to 40 C.F.R. § 52.23, failing to comply with any permit limitation or condition contained within a permit to operate issued under an EPA-approved program that is incorporated into the SIP, is a violation of the SIP and subject to enforcement under Section 113 of the CAA, 42 U.S.C. § 7413. See also Minn. R. 7007.1750.

## C. <u>Title V Requirements</u>

- 28. Title V of the CAA, 42 U.S.C. §§ 7661-7661f, and its implementing regulations at 40 C.F.R. Part 70, establish an operating permit program for certain sources, including "major sources." The purpose of Title V is to ensure that all applicable requirements, including PSD requirements, are included in the Title V operating permit for the source.
- 29. Pursuant to 40 C.F.R. § 70.1(b), Minn. R. 7007.0200, and Minn. R. 7007.0500, all sources subject to the Title V operating permit program, including "major sources," shall have a permit to operate that assures compliance by the source with "all applicable requirements."
- 30. 40 C.F.R. § 70.7(b) provides that no source subject to 40 C.F.R. Part 70 requirements may operate without a permit as specified in the CAA. *See also* Minn. R. 7007.0150.
- 31. Pursuant to Section 503 of the CAA, 42 U.S.C. § 7661b, and 40 C.F.R. § 70.5(a), every owner or operator of a Part 70 source, including a "major source," is required to timely submit an accurate and complete Title V permit application, including information required to be submitted with the application. *See also* Minn. R. 7007.0200.
- 32. Pursuant to Section 501(2)(B) of the CAA, 42 U.S.C. § 7661, 40 C.F.R. § 70.2, and Minn. R. 7007.0200, a "major source" is defined, in part, as any stationary source that directly emits or has the potential to emit one hundred tons per year or more of any air pollutant.
- 33. Pursuant to Section 504(a) of the CAA, 42 U.S.C. § 7661c(a), and 40 C.F.R. § 70.5, every Title V operating permit is required to contain all applicable emission limitations, standards and requirements, a schedule of compliance, and other conditions necessary to assure compliance with applicable requirements, including those contained in a SIP. See also Minn. R. 7007.0500, Minn. R. 7007.0800, and Minn. R. 7001.0300.
- 34. Pursuant to 40 C.F.R. § 70.2, an "applicable requirement" includes any standard or other requirement provided for in the applicable SIP approved or promulgated by EPA that implements the relevant requirements of the CAA, including any SIP revisions. *See also* Minn. R. 7007.0500.
- 35. 40 C.F.R. § 70.5(a)(2) defines "complete application" to include information that is "sufficient to evaluate the subject source and its application and to determine all applicable requirements." See also Minn. R. 7007.0500.
- 36. 40 C.F.R. § 70.5(c) provides that a source may not omit in its Title V permit application information needed to determine the applicability of, or to impose, any applicable requirement.

- 37. 40 C.F.R. § 70.5(c)(3)(vi) provides that a Part 70 source shall include in its Title V permit application all limitations on source operation affecting emissions, or any work practice standards, where applicable, for all regulated pollutants at the source. *See also* Minn. R. 7007.0500(C)(9).
- 38. Pursuant to 40 C.F.R. § 70.5, an applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. See also Minn. R. 7007.1150.
- 39. 40 C.F.R. § 70.5(b) provides that "an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit." *See* also Minn. R. 7007.0600.
- 40. 40 C.F.R. § 70.3 provides that the requirements of Part 70 apply to any "major source" located in a state that has received whole or partial approval of its Title V program.
- 41. EPA approved Minnesota's Title V operating program on an interim basis on June 16, 1995, and fully approved the program on December 1, 2001. See 60 Fed. Reg. 31637, and 66 Fed. Reg. 62967. Minnesota's Title V operating permit program regulations are codified at Minn. R. 7007, and are federally enforceable pursuant to Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3).

## D. New Source Performance Standard Requirements

- 42. Section 111 of the CAA, 42 U.S.C. § 7411, authorizes EPA to promulgate regulations establishing the New Source Performance Standards (NSPS).
- 43. The NSPS regulations apply to the owner or operator of any stationary source that contains an "affected facility," the construction or modification of which is commenced after the date of publication of any proposed standard applicable to that facility. See 40 C.F.R. § 60.1(a).
- 44. Pursuant to the NSPS at 40 C.F.R. § 60.2, an "affected facility" under the NSPS is, with reference to a stationary source, any apparatus to which a standard is applicable.
- 45. Pursuant to Section 111 of the CAA, 42 U.S.C. § 7411, the Administrator promulgated the "Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units," codified at 40 C.F.R Part 60, Subpart Db, 40 C.F.R. §§ 60.40b-49b (Subpart Db).
- 46. An "affected facility" under Subpart Db is a steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 100 million British thermal units per hour (MMBtu/hr). See 40 C.F.R § 60.40b(a).

- 47. Subpart Db of the NSPS at 40 C.F.R. § 60.49b(a), requires owners or operators of each affected facility to submit notification of the date of initial startup, as required by 40 C.F.R. § 60.7.
- 48. The NSPS at 40 C.F.R. § 60.7(a)(3) requires owners or operators subject to an NSPS to furnish the Administrator with notification of the actual date of initial startup of an affected facility within 15 days of the startup date.
- 49. The NSPS at 40 C.F.R. § 60.7(a)(4) requires owners or operators subject to an NSPS to furnish the Administrator with written notification of the date of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, which is postmarked 60 days, or as soon as practicable, before commencing the change, and including information describing the: a) precise nature of the change; b) present and proposed emission control systems; c) productive capacity of the facility before and after the change; and d) the expected completion date of the change.<sup>2</sup>
- 50. The NSPS at 40 C.F.R. § 60.8(a) requires that within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not more than 180 days after initial startup of the facility, the owner or operator of a facility subject to any NSPS shall conduct a performance test(s) and furnish the Administrator a written report of the results of the performance test(s).

#### FACTUAL BACKGROUND.

- 51. Allete is incorporated in Minnesota.
- 52. Allete is a "person," as that term is defined in Section 302(e) of the CAA, 42 U.S.C. § 7602(e).
- 53. Since March 1, 2000, Allete has owned and operated the REC facility located at 502 NW 3<sup>rd</sup> Street, Grand Rapids, Minnesota.
- 54. The REC facility is an energy production facility located on the premises of a groundwood pulp and paper mill located in Grand Rapids, Minnesota (Blandin Mill). The REC facility includes two stoker boilers, Boilers #5 and #6, along with other emission units and associated equipment. The Blandin Mill and REC facility (hereinafter Blandin/REC facility) are permitted as a single major source for purposes of Title V and PSD.
- 55. The REC facility supplies steam, compressed air, and electricity exclusively to the Blandin Mill, which at all times relevant to this NOV/FOV was owned and operated by the Blandin Paper Company (Blandin).
  - 56. The REC facility does not provide electricity to the electric grid.

<sup>&</sup>lt;sup>2</sup> EPA and the owner/operator may also mutually agree that electronic notification satisfies the requirements of 40 C.F.R. § 60.7(a)(4).

- 57. The Blandin/REC facility has the potential to emit more than 250 tons per year of  $NO_x$ .
- 58. The Blandin/REC facility is located in Itasca County, which was designated as an attainment area for the federal 8-hr ozone standard and 1-hr ozone standard at all times relevant to this NOV/FOV. See 56 Fed. Reg. 56782 and 69 Fed. Reg. 23913 (November 6, 1991 and April 30, 2004).
- 59. The Blandin/REC facility is a "major emitting facility" within the meaning of Section 169(1) of the CAA, 42 U.S.C. § 7479(1), and is a "major stationary source" within the meaning of 40 C.F.R. § 52.21(b)(1)(i)(a).
  - 60. Boilers 5 and 6 each have a heat input capacity of greater than 250 million Btus.
- 61. From 2004-2005, Allete replaced portions of the primary superheater and the secondary superheater for Boiler 5. *See* Appendix A.
- 62. Allete replaced portions of the secondary superheater for Boiler 6 in 2005. See Appendix A.
- 63. On April 6, 1988, MPCA issued Amendment No. 6 to Air Emission Facility Permit No. 636A-84-OT-1 establishing individual heat input limits for Boilers 5 and 6 of 270 million Btu/hr at any time, and 247 million Btu/hr when burning only coal (the Boiler Heat Input Limits).
- 64. On April 17, 1995, Blandin applied to MPCA for the Title V Total Facility Operating Permit for the Blandin Mill (Title V Permit), which included Boilers 5 and 6 as emission sources.

#### VIOLATIONS

## A. Violations of the Prevention of Significant Deterioration Provisions

#### 1. Boiler 5 Primary Superheater and Secondary Superheater Replacement

- 65. The 2004-2005 Boiler 5 primary and secondary superheater replacement project set forth in paragraph 61 above, constituted a "major modification," as that term is defined at 40 C.F.R. § 52.21(b)(2)(i) and 40 C.F.R § 52.21(a)(2)(iv)(a).
- 66. The 2004-2005 Boiler 5 primary and secondary superheater replacement project set forth in paragraph 61, above, caused a "significant emissions increase" of  $NO_X$ , as that term is defined at 40 C.F.R. §§ 52.21(b)(40) and (b)(23)(i).
- 67. Allete failed to apply for and obtain a PSD permit for the 2004-2005 Boiler 5 primary superheater and the secondary superheater replacement project at its REC facility.

- 68. Before undertaking the 2004-2005 Boiler 5 primary and secondary superheater replacement project, Allete failed to install and operate pollution control equipment reflecting the application of BACT for  $NO_X$  on Boiler 5 at its REC facility.
- 69. Allete violated and continues to violate Section 165(a) of the CAA, 42 U.S.C. § 7475(a), 40 C.F.R § 52.21(a)(2)(iii), and 40 C.F.R. § 52.21(j), (k), (l), (m), and (r), by commencing construction of, and continuing to operate, a major modification at its REC facility without first applying for and obtaining the required pre-construction PSD permit, conducting a BACT analysis, conducting a source impact analysis, performing air quality modeling and analysis, and installing and operating BACT-level controls on the NO<sub>X</sub> emissions from Boiler 5.

## 2. Boiler 6 Secondary Superheater Replacement

- 70. The 2005 Boiler 6 secondary superheater replacement project set forth in paragraph 62, above, constituted a "major modification," as that term is defined at 40 C.F.R. § 52.21(b)(2)(i) and 40 C.F.R. § 52.21(a)(2)(iv)(a).
- 71. The 2005 Boiler 6 secondary superheater replacement project set forth in paragraph 62, above, caused a "significant emissions increase" of  $NO_X$ , as that term is defined at 40 C.F.R. § 52.21(b)(40) and (b)(23)(i).
- 72. The 2005 Boiler 6 secondary superheater replacement project set forth in paragraph 60 above, caused a "significant net emissions increase" of NO<sub>X</sub>, as that term is defined at 40 C.F.R. §§ 52.21(b)(3)(i) and (b)(23)(i).
- 73. Allete failed to apply for and obtain a PSD permit for the 2005 Boiler 6 secondary superheater replacement project.
- 74. Before undertaking the 2005 Boiler 6 secondary superheater replacement project, Allete failed to install and operate pollution control equipment reflecting the application of BACT for NO<sub>X</sub> on Boiler 6 at its REC facility.
- 75. Allete violated and continues to violate Section 165(a) of the CAA, 42 U.S.C. § 7475(a), 40 C.F.R § 52.21(a)(2)(iii), and 40 C.F.R. § 52.21(j), (k), (l), (m), and (r), by commencing construction of, and continuing to operate, a major modification at its REC facility without first applying for and obtaining the required pre-construction PSD permit, conducting a BACT analysis, conducting a source impact analysis, performing air quality modeling and analysis, and installing and operating BACT-level controls on the NO<sub>X</sub> emissions from Boiler 6.

## B. <u>Violations of Boiler 5 and 6 Heat Input Limits</u>

- 76. From February 2006 to December 2009, Allete operated Boilers 5 and 6 at monthly average heat input limits above 270 million Btu/hr. See Appendix B.
- 77. By failing to comply with the heat input limitation for Boilers 5 and 6 contained in the permit for the Blandin/REC facility, Allete violated Minn. R. 7007.0150, part of the

federally approved and enforceable Minnesota SIP, thus subjecting Allete to enforcement under Section 113 of the CAA, 42 U.S.C. § 7413.

# C. <u>Violations of NSPS Requirements Applicable to</u> <u>Industrial-Commercial-Institutional Steam Generating Units</u>

## 1. Boiler 5 Primary Superheater and Secondary Superheater Replacement

- 78. The 2004-2005 Boiler 5 primary and secondary superheater replacement project set forth in paragraph 59 above, was a "physical or operational change" as defined by 40 C.F.R. 60.14, which resulted in an increase in the Boiler 5 SO<sub>2</sub>, PM, and/or NO<sub>X</sub> "emission rate," as that term is defined at 40 C.F.R. § 60.14(b).
- 79. The 2004-2005 Boiler 5 primary and secondary superheater replacement project set forth in paragraph 59 above, constituted a "modification" under NSPS, as that term is defined at 40 C.F.R. § 60.14(a).
- 80. The 2004-2005 Boiler 5 primary and secondary superheater replacement project set forth in paragraph 59 above, resulted in Boiler 5 becoming a Subpart Db "affected facility," as that term is defined at 40 C.F.R § 60.40b(a).
- 81. Beginning in 2005, Boiler 5 was subject to the Subpart Db requirements of 40 C.F.R. §§ 60.40b-60.49b, and the NSPS General Provisions of 40 C.F.R. §§ 60.1-60.19.
- 82. Allete violated the NSPS General Provisions at 40 C.F.R. § 60.7(a)(3) and Subpart Db at 40 C.F.R. § 60.49b(a) by failing to furnish the Administrator with notification of the actual date of initial startup of Boiler 5 within 15 days of the startup date after the Boiler 5 primary and secondary superheater replacement project set forth in paragraph 61, above.
- 83. Allete violated the NSPS General Provisions at 40 C.F.R. § 60.7(a)(4) for Boiler 5 by failing to furnish the Administrator with written notification of the date of the physical or operational change to Boiler 5 before commencing the change, and including information describing the: a) precise nature of the change; b) present and proposed emission control systems; c) productive capacity of the facility before and after the change; and d) the expected completion date of the change.
- 84. Allete violated the NSPS General Provisions at 40 C.F.R. § 60.8(a) for Boiler 5 by failing to conduct the required performance test and provide a written report of the results of the performance test to the Administrator within 60 days of achieving the maximum steam production at which Boiler 5 would be operated, and within 180 days of the initial startup of Boiler 5 following the secondary superheater replacement project set forth in paragraph 61 above.

## 2. Boiler 6 Secondary Superheater Replacement

- 85. The 2005 Boiler 6 secondary superheater replacement project set forth in paragraph 62 above, was a "physical or operational change" as defined by 40 C.F.R. 60.14, which resulted in an increase in the Boiler 6 SO<sub>2</sub>, PM, and/or NO<sub>X</sub> "emission rate," as that term is defined at 40 C.F.R. § 60.14(b).
- 86. The 2005 Boiler 6 secondary superheater replacement project set forth in paragraph 62 above, constituted a "modification" under NSPS, as that term is defined at 40 C.F.R. § 60.14(a).
- 87. The 2005 Boiler 6 secondary superheater replacement project set forth in paragraph 62 above, resulted in Boiler 6 becoming a Subpart Db "affected facility," as that term is defined at 40 C.F.R § 60.40b(a).
- 88. Beginning in 2005, Boiler 6 was subject to the Subpart Db requirements of 40 C.F.R. §§ 60.40b-60.49b, and the NSPS General Provisions of 40 C.F.R. §§ 60.1-60.19.
- 89. Allete violated the NSPS General Provisions at 40 C.F.R. § 60.7(a)(3) and Subpart Db at 40 C.F.R. § 60.49b(a) by failing to furnish the Administrator with notification of the actual date of initial startup of Boiler 6 within 15 days of the startup date after the Boiler 6 secondary superheater replacement project set forth in paragraph 62, above.
- 90. Allete violated the NSPS General Provisions at 40 C.F.R. § 60.7(a)(4) for Boiler 6 by failing to furnish the Administrator with written notification of the date of the physical or operational change to Boiler 6 before commencing the change, and including information describing the: a) precise nature of the change; b) present and proposed emission control systems; c) productive capacity of the facility before and after the change; and d) the expected completion date of the change.
- 91. Allete violated the NSPS General Provisions at 40 C.F.R. § 60.8(a) for Boiler 6 by failing to conduct the required performance test and provide a written report of the results of the performance test to the Administrator within 60 days of achieving the maximum steam production at which Boiler 6 would be operated, and within 180 days of the initial startup of Boiler 6 following the secondary superheater replacement project set forth in paragraph 62, above.

## D. Violations of the Title V Permit Program

## 1. Boiler 5 Primary and Secondary Superheater Replacement

- 92. As set forth in Paragraph 61, Allete undertook a major modification to Boiler 5 at its REC facility in 2004-2005, which subjected Boiler 5 to the PSD provisions of the CAA and its implementing regulations.
- 93. At all times relevant to this NOV/FOV, Allete failed to supplement, correct, or update the Title V permit application for the Blandin/REC facility to include facility information pertaining

to the modification identified in Paragraph 61, and failed to cite to, and describe the requirement to apply/install BACT for the Boiler 5 NO<sub>X</sub> emissions.

94. Allete violated and continues to violate, Sections 503 and 504 of the CAA, 42 U.S.C. §§ 7661b, and 7661c, 40 C.F.R. §§ 70.1(b) and 70.5, and the Title V provisions of the Minnesota SIP set forth at Minn. R. 7007.0200, 7007.0500, 7007.0800, 7007.0150, 7007.0600, by failing to supplement, correct, or update the Title V permit application for the Blandin/REC facility to identify all applicable requirements, and by failing to submit a timely, accurate, and complete Title V permit renewal application for the Blandin/REC facility with information concerning all applicable requirements.

## 2. Boiler 6 Secondary Superheater Replacement

- 95. As set forth in Paragraph 62, Allete undertook a major modification to Boiler 6 at its REC facility in 2005, which subjected Boiler 6 to the PSD provisions of the CAA and its implementing regulations.
- 96. At all times relevant to this NOV/FOV, Allete failed to supplement, correct, or update the Title V permit application for the Blandin/REC facility to include facility information pertaining to the modification identified in Paragraph 62, and failed to cite to, and describe the requirement to apply/install BACT for the Boiler 6 NO<sub>X</sub> emissions.

Allete violated and continues to violate, Sections 503 and 504 of the CAA, 42 U.S.C. §§ 7661b, and 7661c, 40 C.F.R. §§ 70.1(b) and 70.5, and the Title V provisions of the Minnesota SIP set forth at Minn. R. 7007.0200, 7007.0500, 7007.0800, 7007.0150, 7007.0600, by failing to supplement, correct, or update the Title V permit application for the Blandin/REC facility to identify all applicable requirements, and by failing to submit a timely, accurate, and complete Title V permit renewal application for the Blandin/REC facility with information concerning all applicable requirements.

## 3. Boiler 5 and 6 Heat Input Limits

- 97. As set forth in Paragraph 63, at all times relevant to this NOV/FOV, Boilers 5 and 6 were subject to individual heat input limits of 270 million Btu/hr at any time, and 247 million Btu/hr when burning only coal.
- 98. At all times relevant to this NOV/FOV, Allete failed to supplement, correct, or update the Title V permit application for the Blandin/REC facility to include facility information pertaining to the Boiler 5 and 6 Heat Input Limits.
- 99. Allete violated and continues to violate, Sections 503 and 504 of the CAA, 42 U.S.C. §§ 7661b, and 7661c, 40 C.F.R. §§ 70.1(b) and 70.5, and the Title V provisions of the Minnesota SIP set forth at Minn. R. 7007.0200, 7007.0500, and 7007.1150, by failing to supplement, correct, or update the Title V permit application for the Blandin/REC facility to identify all applicable requirements, and by failing to submit a timely, accurate, and complete Title V permit

renewal application for the Blandin/REC facility with information concerning all applicable requirements.

## 4. New Source Performance Standard Subpart Db

- 100. Boilers 5 and 6 at the REC facility are steam generating units that have a heat input capacity from fuels combusted in the steam generating unit of greater than 100 MMBtu/hr.
- 101. As set forth in paragraphs 61-62, Allete undertook modifications to Boilers 5 and 6 at the REC facility in 2004 and 2005, thereby subjecting Boilers 5 and 6 to, *inter alia*, NSPS Subpart Db.
- 102. At all times relevant to this NOV/FOV, Allete failed to supplement, correct, or update the Title V permit application for the Blandin/REC facility to include facility information pertaining to the modifications to Boilers 5 and 6 identified in Paragraphs 61 and 62, and failed to cite to, and describe the requirement to comply with the provisions of NSPS Subpart Db.
- 103. Allete violated and continues to violate, Sections 503 and 504 of the CAA, 42 U.S.C. §§ 7661b, and 7661c, 40 C.F.R. §§ 70.1(b) and 70.5, and the Title V provisions of the Minnesota SIP set forth at Minn. R. 7007.0200, 7007.0500, 7007.0800, 7007.0150, 7007.0600, by failing to supplement, correct, or update the Title V permit application for the Blandin/REC facility to identify all applicable requirements, and by failing to submit a timely, accurate, and complete Title V permit renewal application for the Blandin/REC facility with information concerning all applicable requirements.

#### **ENFORCEMENT AUTHORITY**

104. Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), provides that any time after the expiration of 30 days following the date of the issuance of a Notice of Violation, the Administrator may, without regard to the period of violation, issue an order requiring compliance with the requirements of the applicable SIP, issue an administrative penalty order pursuant to Section 113(d), or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

105. Section 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(3), provides that whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any requirement or prohibition of, *inter alia*, any rule promulgated under the PSD requirements of Section 165(a) of the CAA, 42 U.S.C. § 7475(a), and 40 C.F.R. § 52.21; Title V of the CAA, 42 U.S.C. §§ 7661-7661f, or any rule or permit issued thereunder, the Administrator may issue an administrative penalty order under Section 113(d), issue an order requiring compliance with such requirement or prohibition, or bring a civil action pursuant to Section 113(b) for injunctive relief and/or civil penalties.

Dated  $\frac{3}{3}/\frac{3}{1}$ 

Cheryl L.) Newlon

Air and Radiation Division

## Appendix A

## Allete, Inc. Projects for Rapids Energy Center

Facility/Project3	Work Completed <sup>4</sup>
Rapids Energy Center	- Replacement of portions of primary superheater section
Boiler #5:	and all of secondary superheater section
Work Completed: September 30, 2005	
Cost: >\$1,000,000 (with	
Boiler #6)	
Rapids Energy Center Boiler #6:	- Replacement of secondary superheater section
Work Completed: September 30, 2005	
Cost: >\$1,000,000 (with Boiler #5)	

The dates provided represent approximate dates the modifications were completed.

The list of activities described is not intended to be an exhaustive list, but rather a description of the major work completed.

Appendix B

Allete, Inc. Monthly Average Heat Inputs

Month/Year	Monthly	Month/Year	Monthly	Month/Year	Monthly
	Average		Average		Average
	Heat		Heat		Heat
	Input		Input		Input
	(million		(million		(million
	Btu/hr)		Btu/hr)		Btu/hr)
Jan-01	248.8	Jan-04		Lan 07	
Feb-01	236.6	Feb-04	207.3 189.6	Jan-07 Feb-07	237.5
Mar-01	238.9	Mar-04	214.1	Mar-07	311.6 273.0
Apr-01	229.5	Apr-04	230.5	Apr-07	223.8
May-01	198.3	Дрг-04 Мау-04	210.3	May-07	235.4
Jun-01	194.4	Jun-04	213.7	Jun-07	225.2
Jul-01	195.1	Jul-04	223.0	Jul-07	240.6
Aug-01	252.4	Aug-04	267.4	Aug-07	244.7
Sep-01	219.8	Sep-04	177.5	Sep-07	245.3
Oct-01	222.3	Oct-04	190.0	Oct-07	202.0
Nov-01	239.6	Nov-04	215.5	Nov-07	273.2
Dec-01	237.2	Dec-04	231.4	Dec-07	270.6
Jan-02	216.6	Jan-05	267.9	Jan-08	251.7
Feb-02	242.7	Feb-05	252.5	Feb-08	182.7
Mar-02	244.4	Mar-05	144.3	Mar-08	192.6
Apr-02	180.8	Apr-05	173.6	Apr-08	164.0
May-02	225.1	May-05	248.8	May-08	210.4
Jun-02	185.4	Jun-05	244.0	Jun-08	202.2
Jul-02	156.9	Jul-05	207.4	Jul-08	184.7
Aug-02	241.1	Aug-05	176.8	Aug-08	204.5
Sep-02	207.3	Sep-05	235.0	Sep-08	204.6
Oct-02	205.5	Oct-05	248.1	Oct-08	176.8
Nov-02	213.5	Nov-05	288.1	Nov-08	202.5
Dec-02	210.5	Dec-05	291.3	Dec-08	241.1
Jan-03	233.1	Jan-06	278.3	Jan-09	255.3
Feb-03	216.3	Feb-06	287.8	Feb-09	245.9
Mar-03	218.1	Mar-06	272.3	Mar-09	233.7
Apr-03	210.5	Apr-06	216.7	Apr-09	149.0
May-03	210.5	May-06	247.3	May-09	194.3
Jun-03	191.1	Jun-06	·223.5	Jun-09	194.5
Jul-03	157.5	Jul-06	278.0	Jul-09	197.5
Aug-03	195.2	Aug-06	283.7	Aug-09	188.3
Sep-03	193.3	Sep-06	222.1	Sep-09	170.1
Oct-03	193.5	Oct-06	236.8	Oct-09	179.6
Nov-03	174.7	Nov-06	274.1	Nov-09	183.4
Dec-03	194.0	Dec-06	271.1	Dec-09	244.6

#### **CERTIFICATE OF MAILING**

I, Tracy Jamison, certify that I sent a Notice of Violation and Finding of Violation, No. EPA-5-11-MN-01, by Certified Mail, Return Receipt Requested, to:

Paul Undeland Managing Superintendent, Rapids Energy Center Minnesota Power Company Division of Allete, Inc. 502 NW 3<sup>rd</sup> Street Grand Rapids, Minnesota 55744

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first class mail to:

Jeff T. Connell, Manager Compliance and Enforcement Section Industrial Division Minnesota Pollution Control Agency

Warren L. Candy
Vice President, Generation Operations
Minnesota Power Company
Division of Allete, Inc.
30 West Superior Street
Duluth, Minnesota 55802-2093

William H. Lewis, Jr. Morgan, Lewis & Bockius LLP 1111 Pennsylvania Avenue, N.W. Washington, DC 20004

Lyssa Supinski Senior Attorney Minnesota Power Company Division of Allete, Inc. 30 West Superior Street Duluth, Minnesota 55802-2093

On the 1 day of April, 2011

Tracy Jamison

Administrative Professional Assistant Planning and Administration Section

CERTIFIED MAIL RECEIPT NUMBER: 70010320 00060192018